

Memorandum

To: Working Group Participants: Nikia Greene, Daryl Reed, Karen Sullivan, Eric Hassler, Laura Williamson, Charles Partridge, Rosalind Schoof, Julia Crain, Christina Perkins, Josh Bryson, Matthew Ferguson, Cynthia Van Landingham, Arthur Wendel, Dave Hutchins, Joe Griffin, John Ray, Chris Wardell, Seth Cornell, Heather Zimmerman, Bill Macgregor

From: Steve Ackerlund

Copy:

Date: September 6, 2019

Subject: Summary of the September 5, 2019 Superfund Health Study Working Group Meeting

Attendees

Nikia Greene (EPA), Matthew Ferguson (DPHHS), Charles Partridge (EPA), Chris Wardell (EPAP, Rosalind Schoof (Ramboll), Cynthia Van Landingham (Ramboll), Bill Macgregor (CTEC), Joe Griffin (CTEC), Karen Sullivan (BSB), Eric Hassler (BSB), Brandon Warden (BSB), Steve Ackerlund (Ackerlund, Inc.), Luke Pokorny (AR), Lynn Woodbury (CDM).

Meeting Purpose

Ramboll had provided an initial draft Health Study document, without a public health statement, major interpretations or recommendations. The Working Group was convened to discuss the draft information and develop ideas for completing a full draft document.

Bold text below highlight commitments made during the meeting.

Meeting Summary

The morning session was an unstructured discussion of top-of-mind needs.

Nikia: Welcomed Lynn Woodbury, CDM, to the Working Group. He appreciates the comments provided to make this a broad stakeholder effort, and he appreciates that Ramboll met with John Ray individually to respond to his concerns.

Charlie: The Anaconda risk assessment by ATSDR is delayed. Expectations are that good news regarding exposure will ultimately emerge The Butte health study will need to recommend

evaluation of this work as a future effort. There was general recognition that at least a voluntary urinary arsenic program should be implemented.

The Office of Inspector General (OIG) is doing risk communication research at 3 sites in country, including Anaconda. They are assessing how things have been done and making recommendations. Their report is expected in couple months.

The lead isotope study in Butte has funding and we assume its progressing. Charlie will follow-up.

Karen: We had a great turnout at health study meeting in Anaconda. Community interest is currently high, suggesting a good time for public health intervention. Also, the 2020 County Health Needs Assessment has started, with interviews being arranged. Both Joe and Bill are invited to participate in the steering committee to help guide the inclusion of Superfund related health concerns.

McDermott is doing a brain cancer study combining Butte and Anaconda showing positive results, but DPHHS has also evaluated this and does not have positive results. It's anticipated McDermott will publish. EPA is also concerned with the methodology and accuracy of the findings. Hailer and McDermott are also looking into high levels of metals in Butte newborns "first poops" (meconium) and extrapolating effects from that. Charlie stated there are no benchmarks for assessing meconium and it's a novel approach, so it's difficult to assess findings. Other sources than mining could influence metals concentrations in meconium, and there are no studies relating such elevated levels to adverse health effects. Karen is concerned about these "scary" topics in a community setting, wants to search for the truth, and be prepared to address these developments.

Roz: No response yet on the letter to the editor addressing the prior McDermott cancer study, but she will check in. The letter in that case was a critique on overreach of interpretation, not methodology that is the concern with the brain cancer study. Charlie is concerned with lumping Butte and Anaconda, which makes sense from a distance, but conditions are different in the two communities. Joe suggest the letter get attached to the health study report. Steve described a Citizen Jury process that can be done in a public setting to try something new to change the past expert vs expert dynamic on topics like this.

Bill: How do we see the Working Group efforts extend into the community? RMAP is not going away. He suggests we consider closer connection to the Board of Health. Eric mentioned that EPA 5-year review also carries issues perpetually forward. Karen stated the BOH is also looking for clarity on roles of the Working Group. Charlie state the OIG report may have helpful recommendations. Steve stated that the health study should identify working group members and point to a charter. Roz mentioned the working group should stay Superfund focused, and Eric mentioned concern with breadth beyond RMAP! Nikia said the Proposed Plan has 3 bullets for changes to the ROD: 1) BSB with Working Group will periodically evaluate...5 additional

evaluations remain in the original 30 year period, 2) respect personal privacy, 3) all stakeholders will continue to contribute to the working group. This is still somewhat vague and it does need to be clarified. Joe stated arsenic is one of the big issues with the community, and Charlie reiterated that an arsenic biomonitoring study in Butte is not going to be useful, but the opportunity to get monitoring needs to be offered to concerned community members. Eric stated they are gathering arsenic data but don't know what to do with it. It's mostly along the railroad corridor, which was remediated, with current possible concern now localized around the former Zinc Mill area. Eric stated there are two parts to RMAP: medical monitoring and a construction program, and managing both is a challenge. Maybe RMAP should not be the medical monitoring group? Lynn reminded the group that the past health study had urinary arsenic offered under certain conditions, and Eric stated few met the criteria.

Roz: A challenge in the report is to capture the changing nature of the Working Group mandate. Currently it's just factual, but we need to make interpretations. There is a wealth of information that has never been put together before. For example, EPA cleanup criteria for lead are below where epidemiology can measure impacts, by design, but it's a difficult concept to communicate to the public. Nikia reminded us that EPA authority is limited to reviewing studies related to historic mining. Cynthia said the report evaluates trends in blood-lead, but it's not a comprehensive health study on exposure and overall health. Steve suggested that chapter summaries should provide interpretations and recommendations. Roz also wants to include forward looking recommendations like updates in biomonitoring techniques. Nikia interprets health study to mean the 6 required studies over 30 years, but we now have the review of other studies included, and we need to state how these relate to the requirements. The community now thinks everything is on the table, creating some confusion. While we are required to look at other studies, we not required to look at topics not related to the three COCs. Bill reviewed the requirements, which state BSB is to do the "health study" and that it is to look at a broad range of potential health impacts.

Steve: Suggested that the public health statement address public health questions, but Roz would prefer more a review of the report. Perhaps we need a separate document to present the information to the public? Charlie concurred. Roz stated there are other needs not addressed, and a future effort might address community needs. Roz suggested moving the community health needs summary into the Introduction along with the risk perception work to set the stage for what is going on in Butte right now.

Seth: Butte has higher percentage of children with elevated levels. We should spell out who should continue to get screening. Seth would like to see I would like to see the Working Group recommend universal lead screening for all children in Butte, which is aligned with the recommendations from the American Academy of Pediatrics, and universal lead screening for all pregnant women or women considering becoming pregnant in Butte, which is aligned with the recommendations from the American College of Obstetrics and Gynecology. Also, he suggests we need one person at Health Department who focuses on just environmental

Superfund biomonitoring. Joe says it should not just be WIC but involve all physicians. Eric said they tried. Seth said it's outside RMAP's focus, and we need a more integrated, dedicated person to make that effective. Eric reminded us that biomonitoring was originally about how to prioritize work, not to support health studies, which creates ongoing difficulties. Roz described how despite that, we have been able to do one of the most comprehensive studies on Superfund effectiveness.

Eric: RMAP does not have a hard value to interpret urinary arsenic results. After general discussion, Charlie stated that there is not direct connection between urinary arsenic concentration and health effects because of the different forms/complexes of arsenic and different sources such as diet. If we are moving from using the data for targeting remediation to more general health study, it should likely be done elsewhere.

Lunch Break, followed by a walk through the draft document.

Bill: Proposed that BSB should be listed as the author, with working group members listed. Karen was not sure she agreed; there are two PRPs. Nikia pointed out it's drafted by AR's contractor. Ultimately, the plan is to transfer Superfund responsibilities to BSB, funded by AR. Roz reviewed the past cover page that stated: prepared for BSB and AR, prepared by Environ. People are generally supportive of this approach with addition of working group on the cover. Seth asked disclosures about source of funding be added. Joe questioned the RMAP working group title. Steve stated we have called this a Health Study Working Group. All agreed to Roz's suggestion of: Superfund Health Study Working Group.

Steve: Suggested Section 1 contain a summary of Superfund and RMAP so that the reader is given perspective about changing exposure over time and how that relates to various risk assessments and blood-lead reductions. **Brandon was designated to gather this information.**

Lynn: Offered to do detailed review of risk assessment summaries in Chapter 2. Seth asked for lead toxicity to be addressed separately from risk assessment. Insert some CDC/ATSDR language on lead toxicity.

Roz: Asked about schedule needs. Steve asked for another working group draft to include interpretations and recommendations, with a draft to the public by the end of the year. **Nikia suggested by end of November for public draft, with the next working group draft by Oct. 1. Therefore, all comments are needed within a week.**

Steve: Would like to see more clarity on CDC vs EPA blood-lead action levels. Lynn stated that RMAP has adjusted its program to the lower revised CDC level.

Seth: Asked for the Health Study recommendations to include testing for children. Eric said all children are eligible, the struggle is getting participation. Seth reiterated that medical guidance says kids should be tested, and we should carry these recommendation forward in this study.

Again, the Health Department needs a point person for managing health needs and communications with physicians, etc.

Nikia: had to go. He encouraged the group not to get caught up in limitations of Superfund. The community doesn't care where contamination is coming from if it's a health effect.

Bill: Risk perception survey indicated people see RMAP as effective, but still have lead exposure concerns. So they don't see the benefits of the RMAP program.

Eric: Do we need to provide references in the report on where to go for more information? It was generally thought that not listing names, but providing general office contacts for BSB Health Department, DPHHS, etc. would be appropriate.

Roz: We need a new community involvement coordinator. Eric has requested that person be in Butte. Bill has heard this person would be focused on Butte. Steve mentioned that CICs are often spread too thin, so it was generally agreed we should ultimately recommend the kind of CIC related services needed in Butte.

Roz: Presented Table 14 to discuss the low percentage of blood-lead confirmation testing and the low percentage of confirmed elevated blood lead. Seth asked that skin contamination currently described in the report be supplemented with uncertainty over when confirmation is done. If people are advised on prevention and then come back later for confirmation, we should expect reductions. Eric and Karen suggested we need recommendations on how to ensure more confirmation data is captured. Cynthia said the confirmation data was in a comment field and varied in quality of information. Karen offered to draft a recommendations for changes to increase rapid confirmation testing and accuracy of reporting.

Bill: Asked for captions on figures to explain what the graphic says.

Roz: Infant blood-lead data will be broken out by age. They seek to understand via statistical inquiry why infants have higher percentage of elevated levels. Seth stated this is another reason why all pregnant mothers should be tested, consistent with general medical recommendations.

Roz and Cynthia: Details of presentation for other graphs and tables were discussed. Some key findings discussed were: differences in uptown (higher) vs. flats, ongoing reduction in blood-lead overall but with reducing rates of reduction, differences between gender, and seasonal variations (which points to ongoing environment exposure, particularly in the Uptown area).